

the endplates of the vertebral bodies, the implantation space having a front wall, said implant comprising:

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a body manufactured from a bone ring obtained from a major long bone of a human, said body having a perimeter, a leading end for insertion first into the disc space, a trailing end opposite said leading end, and opposite sides, said body having a length along a mid-longitudinal axis of said implant, said leading end having a generally straight portion along a portion of the perimeter of said body adapted to abut the front wall of the implantation space when said implant is installed into the implantation space, said trailing end being at least in part curved along a portion of the perimeter of said body;

opposite upper and lower surfaces adapted to be placed in contact with and to support the adjacent vertebral bodies, said upper and lower surfaces being non-arcuate;

said opposite sides connecting said upper and lower surfaces and said leading and trailing ends; and

an opening passing through said upper and lower surfaces for permitting for the growth of bone from adjacent vertebral body to adjacent vertebral body through said implant.

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36. (Amended) The implant of claim 33, wherein said fusion promoting material is bone morphogenetic protein.

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43. (Amended) An interbody spinal implant made of a bone composite material for insertion at least in part into an implantation space formed across the height of a disc space between adjacent vertebral bodies of a human spine and into at least

a portion of the endplates of the vertebral bodies, the implantation space having a front wall, said implant comprising:

a body manufactured from a bone composite material, said body having a perimeter, a leading end for insertion first into the disc space, a trailing end opposite said leading end, and opposite sides, said body having a length along a mid-longitudinal axis of said implant, said leading end having a generally straight portion along a portion of the perimeter of said body adapted to abut the front wall of the implantation space when said implant is installed into the implantation space, said trailing end being at least in part curved along a portion of the perimeter of said body;

opposite upper and lower surfaces adapted to be placed in contact with and to support the adjacent vertebral bodies, said upper and lower surfaces being non-arcuate;

said opposite sides connecting said upper and lower surfaces and said leading and trailing ends; and

an opening passing through said upper and lower surfaces for permitting for the growth of bone from adjacent vertebral body to adjacent vertebral body through said implant.

78. (Amended) The implant of claim 75, wherein said fusion promoting material is bone morphogenetic protein.

85. (Amended) An interbody spinal implant made of cortical bone for insertion at least in part into an implantation space formed across the height of a disc space between adjacent vertebral bodies of a human spine and into at least a portion of

the endplates of the vertebral bodies, the implantation space having a front wall,
said implant comprising:

a body manufactured from a bone ring obtained from a major long bone of
a human, said body having a perimeter, a leading end for insertion first into the
disc space, a trailing end opposite said leading end, and opposite sides
therebetween, said body having a length along a mid-longitudinal axis of said
implant, said leading end having a generally straight portion along a part of the
perimeter of said body adapted to abut the front wall of the implantation space
when said implant is installed into the implantation space, said trailing end being
at least in part curved along a portion of the perimeter of said body;

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opposite upper and lower surfaces adapted to be placed in contact with
and to support the adjacent vertebral bodies, said upper and lower surfaces
being non-arcuate;

said opposite sides connecting said upper and lower surfaces and said
leading and trailing ends;

an opening passing through said upper and lower surfaces for permitting
for the growth of bone from adjacent vertebral body to adjacent vertebral body
through said implant; and

said implant being formed by the process of cutting a section of a long
bone in a direction transverse to the longitudinal axis of the long bone to form at
least a portion of a bone ring and machining said leading end to form said
straight portion.

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120. (Amended) The implant of claim 117, wherein said fusion promoting material is bone morphogenetic protein.

Please add the following new claims:

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- 127. The implant of claim 1, wherein said curved portion generally approximates the natural curvature of the bone ring.
128. The implant of claim 43, wherein said curved portion generally approximates the natural curvature of the bone ring.
129. The implant of claim 85, wherein said curved portion generally approximates the natural curvature of the bone ring.
130. A method for performing a spinal surgery across the height of a disc space between two adjacent vertebral bodies of a human spine, the method comprising the steps of:
- removing bone from each of the adjacent vertebral bodies with a bone cutting device to form an implantation space having a front wall and opposite side walls, said front wall having a generally flat portion; and
 - inserting a spinal implant into the implantation space, the spinal implant being formed from a bone ring obtained from a major long bone of a human, the implant having a generally straight leading end from side to side adapted to abut the generally flat portion of the front wall of the implantation space and opposite sides adapted to abut the side walls of the implantation space, respectively.
131. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with fusion promoting substances.

132. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with a fusion promoting material other than bone.
133. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with bone morphogenetic protein.
134. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with an osteogenic material.
135. The method of claim 134, wherein said osteogenic material is a material other than bone.
136. The method of claim 134, wherein said osteogenic material is genetic material coding for production of bone.
137. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with genetic material coding for production of bone.
138. The method of claim 130, wherein the inserting step includes the step of inserting a spinal implant in combination with a chemical substance to inhibit scar formation.
139. A method for performing a spinal surgery across the height of a disc space between two adjacent vertebral bodies of a human spine, the method comprising the steps of:
- removing bone from each of the adjacent vertebral bodies with a bone cutting device to form an implantation space having a front wall and opposite side walls, said front wall having a generally flat portion; and
 - inserting a spinal implant into the implantation space, the spinal implant

being formed of a bone composite material, the implant having a generally straight leading end from side to side adapted to abut the generally flat portion of the front wall of the implantation space and opposite sides adapted to abut the side walls of the implantation space, respectively.

140. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with fusion promoting substances.
141. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with a fusion promoting material other than bone.
142. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with bone morphogenetic protein.
143. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with an osteogenic material.
144. The method of claim 143, wherein said osteogenic material is a material other than bone.
145. The method of claim 143, wherein said osteogenic material is genetic material coding for production of bone.
146. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with genetic material coding for production of bone.
147. The method of claim 139, wherein the inserting step includes the step of inserting a spinal implant in combination with a chemical substance to inhibit scar formation.--